



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION IX

75 Hawthorne Street  
San Francisco, CA 94105

AUG 28 2017

August 28, 2017

Certified Mail No: 7016 1370 0000 0748 9788

Ms. Susan Worley  
Manager, Health, Environmental and Safety  
Chevron El Segundo Refinery  
324 West El Segundo Blvd  
El Segundo, CA 90245

Dear Ms. Worley:

From April 18-20, 2017, representatives of the U.S. Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC) conducted a compliance evaluation inspection (CEI) of the Chevron El Segundo Refinery with EPA ID No: CAD 008336901. The purpose of the inspection was to determine Chevron El Segundo Refinery's compliance with applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (CFR), Chapter 40, Parts 261-265, 268, 273, and 279, and the California Code Regulations (CCR), Title 22, Division 4.5 and the California Health and Safety Code, Division 20, and permit provisions in the Hazardous Waste Facility Permit 07-GLN-02 issued by DTSC.

The inspectors conducted a physical inspection of the facility and reviewed records related to Chevron El Segundo Refinery's hazardous waste management practices. EPA appreciates the facility's efforts to comply with the RCRA requirements, and we anticipate no further action at this time. EPA's non-action does not constitute non-liability for Chevron El Segundo Refinery, nor does it constitute non-action by local or state agencies. If you have any questions related to this letter and the attached report, please contact Sharon Lin of my staff at (415) 972-3446.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. McDaniel", is placed above the typed name.

Douglas K. McDaniel  
Chief, Waste and Chemical Section  
Enforcement Division

Attachment – inspection report

Cc: Roberto Kou, DTSC Chatsworth



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION IX

75 Hawthorne Street  
San Francisco, CA 94105

<http://www.epa.gov/region9/waste/enforcement/index.html>

**Purpose:** RCRA Compliance Evaluation Inspection

**Facility:** Chevron Products Company,  
El Segundo Refinery

**Location Address:** 324 W. El Segundo Blvd.  
El Segundo, CA 90245

**RCRA ID Number:** CAD008336901

**Date of Inspection:** April 18, 2017  
**Time In/Time Out** April 20, 2017

**U.S. EPA Representative:** Sharon Lin, EPA Region 9  
RCRA Enforcement Officer  
(415) 972-3446  
[Lin.sharon@epa.gov](mailto:Lin.sharon@epa.gov)

Rick Sakow, EPA Region 9  
RCRA Enforcement Officer

Jackie Vega, EPA  
National Enforcement Investigations Center  
RCRA Inspector


### California Department of Toxic Substances Control:

Brian Wu, inspector  
Andy Yang, inspector  
April Rainey, inspector  
Danny Ho, inspector

**Facility Representative:** Susan Worley  
Environmental Health & Safety Manager  
[susb@chevron.com](mailto:susb@chevron.com)

**Report Date:** August 28, 2017

**Report Prepared by:**

  
Sharon Lin

Peer Reviewed by:

  
Rick Sakow

Supervisor Review:

  
Doug K. McDaniel

## A. Introduction

On April 18-20, 2017, representatives of the U.S. Environmental Protection Agency, Region 9 (EPA) and California Department of Toxic Substances Control (DTSC) conducted a hazardous waste management compliance evaluation inspection (CEI) of Chevron El Segundo Refinery, located at 324 W. El Segundo Blvd in El Segundo, California. The purpose of the inspection was to determine Chevron El Segundo's compliance with applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (C.F.R.), Chapter 40, Parts 261-265, 268, 273, and 279, the California Health and Safety Code (HSC), Division 20, Chapter 6.5; the California Code of Regulations (C.C.R.), Title 22, Division 4.5; and specific Hazardous Waste Facility Permit (Permit) provisions. Chevron El Segundo Refinery is operating under a hazardous waste facility permit 07-GLN-02, which became effective on May 17, 2007 and expires on May 17, 2017.

## B. Facility Background

Chevron El Segundo Refinery was originally constructed by the Standard Oil Company (California) in 1911 and occupied 843 acres. The refinery currently has a refining capacity of 280,000 barrels of crude oil per day. The crude slate that the refinery processes includes crude from Alaska North Slope, San Joaquin Valley, domestic blend, and waxy low-sulfur crude. The refinery produces fuel gas, liquid petroleum gas (LPG), motor gasoline, jet fuel, diesel fuel, and coke.

## C. On-Site Inspection

EPA conducted the on-site inspection of Chevron April 18-20, 2017. Credentials were presented to Susan Worley, manager for health, environmental and safety. During the on-site inspection, Chevron El Segundo representatives provided a site windshield tour, detailed process descriptions, process area walkthroughs, and documentation/records pertaining to the inspection. The areas inspected included the 90 day container storage area, closed Landfarm unit, Hazardous Waste Storage and Treatment Unit, Tank T-1, Tank T-2, heat exchanger bundle pad, wastewater treatment plant, MOSC (mobil oil secondary coker) waste processing system, selected surface impoundment(s), and recovered oil tanks that held oil bearing materials. An exit conference between regulatory and facility personnel was conducted at the conclusion of the on-site inspection. Photographs collected during the inspection can be found in the appendix.

#### **D. Records Review**

EPA inspection team reviewed manifests, land disposal restriction (LDR) notifications, 2015-2017 manifests, biennial report, profiles for selected wastes, and contingency plan. The EPA inspection team also reviewed training records for the following PSC (contractor to Chevron) hydroblasting technicians: Anthony Pellecer, Candy Chavez, Fernando Moran, and Lupe Medina. These employees' records were selected because they were identified as key personnel handling hazardous wastes from the site walkthrough and documentation reviewed by the EPA inspectors.



## Appendix

### Photograph Log for EPA's April 18-20, 2017 RCRA Comprehensive Evaluation Inspection of the Chevron Refinery, El Segundo, CA

*Photographs on this log were taken with a Pentax Optio W80 by Rick Sakow, Enforcement Division, EPA Region 9 on April 18-20, 2017. Photos IMGP0644- IMGP0646 were taken by Sharon Lin of EPA Region 9.*

IMGP0575	Process diagram written on a white board on April 18, 2017 by Lauren Allison, Value Chain Optimization Short Range Oil Planning Analyst (Oils Planning Analyst).
IMGP0576	Wash Pad located within the Reservoir 9 Hazardous Waste Accumulation Area (HWAA).
IMGP0577	Low point within the Reservoir 9 Wash Pad shown in IMGP0576. A flexible pipe and metal grate are located at the corner of the Wash Pad to collect and remove liquids.
IMGP0578	View of the pumping system connected to the Reservoir 9 Wash Pad, as shown in IMGP0577 and IMGP0578. The blue baker tank in this photo hold liquids and the two green containers are carbon filters.
IMGP0579	View of roll-off bins located at the Reservoir 9 HWAA. The bins marked "SCRAPED" have had materials removed and will be washed clean.
IMGP0580	View of roll-off bins located at the Reservoir 9 HWAA. The pink label on the bins indicate that the containers may hold materials / wastes with benzene.
IMGP0581	Additional view with less glare of the label shown in IMGP0580. The material was called "MOSC material".
IMGP0582	Material Identification Label on a roll-off bin located at the Reservoir 9 HWAA. The material was called "Tank Bottoms" from Tank 121.
IMGP0583	Two roll-off bins of spent carbon.
IMGP0584	Materials Identification Label on the front (southern end the Reservoir 9 HWAA) red roll-off bin shown in IMGP0583. The material as called "Carbon" from various air pollution control devices at ETP with an accumulation start date of 1/31/2017.
IMGP0585	Materials Identification Label on the rear (northern end the Reservoir 9 HWAA) red roll-off bin shown in IMGP0583. The material as called "Carbon" from various air pollution control devices at ETP with an accumulation start date of 1/31/2017.
IMGP0586	Pallets of e-waste at the Reservoir 9 HWAA.
IMGP0587	Waste batteries at the Reservoir 9 HWAA.
IMGP0588	Overview of the lab pack staging area within the Reservoir 9 HWAA.
IMGP0589	View of the former process water pond under closure, referred to as the "Land Farm". This photo was taken facing south.
IMGP0590	Staging area at the Hazardous Waste Storage and Treatment Facility (HWSTF).
IMGP0591	View of Tank T-1 and Tank T-2 (black) at the HWSTF. The lighter color tanks (Tank T-103 and T-104) are shown in the background of this photo. At the time of the inspection, Chevron personnel explained that all four tanks were empty and were in not in service. The air vents on Tanks T-1 and T-2 were open, allowing air to enter and exit.
IMGP0592	Hazardous waste label on a 55-gallon container at the HWSTF. The hazardous waste label read "Silver Nitrate" from the Lab Main QCD Laboratory / FH-27 with an accumulation start date of 1/4/2017.

IMGP0593	Side view of the container shown in IMGP0592.
IMGP0594	3-gallon container at the HWSTF. The hazardous waste label read "Contaminated Karl Fischer Waste" from the Lab Main Karl Fischer Titrator from various labs with an accumulation start date of 12/13/2016.
IMGP0595	Entrance to the Heat Exchanger Bundle Cleaning Pad.
IMGP0596	55-gallon container located at the Heat Exchanger Bundle Cleaning Pad with a hazardous waste label which read "Contaminated trash and debris, PPE, paper, rags" with an accumulation start date of 4/13/2017. The ring on the top of the container was not secured and the lid was open a jar.
IMGP0597	Hazardous waste label on the container shown in IMGP0596.
IMGP0598	Three of the four containers in this image were not secured shut. The container in shown in the front right of this cluster was properly closed. The other three containers (front left and the two in the back) had unsecured rings on the top of the containers and were not closed. These containers had hazardous waste label which read "Contaminated trash and debris, PPE, paper, rags" and they were located at the Heat Exchanger Bundle Cleaning Pad.
IMGP0599	Hazardous waste label on the front left container shown in IMGP0598.
IMGP0600	View of a heat exchanger located at the Heat Exchanger Bundle Cleaning Pad.
IMGP0601	View of the Heat Exchanger Bundle Cleaning Pad.
IMGP0602	View of the Heat Exchanger Bundle Cleaning Pad.
IMGP0603	View of a trench within the Heat Exchanger Bundle Cleaning Pad.
IMGP0604	View of the Heat Exchanger Bundle Cleaning Pad.
IMGP0605	View of liquid and debris within a trench at the Heat Exchanger Bundle Cleaning Pad.
IMGP0606	View of a trenches within the Heat Exchanger Bundle Cleaning Pad.
IMGP0607	View of a hydro-blaster at the Heat Exchanger Bundle Cleaning Pad.
IMGP0608	Weirs within the trenches at the Heat Exchanger Bundle Cleaning Pad that segregates solid debris from liquids that discharge to the sump shown in IMGP0612.
IMGP0609	Accumulated dark gray debris at the Heat Exchanger Bundle Cleaning Pad.
IMGP0610	View of the trenches within the Heat Exchanger Bundle Cleaning Pad.
IMGP0611	Hydro-blasters located within the Heat Exchanger Bundle Cleaning Pad.
IMGP0612	View of the sump located on the eastern portion of the Heat Exchanger Bundle Cleaning Pad. Lupe Medina of PSC estimated during the inspection that the sump is approximately 6 feet deep and holds roughly 200 gallons of liquid.
IMGP0613	View of the sump shown in IMGP0612.
IMGP0614	View of the sump shown in IMGP0612.
IMGP0615	Two 55-gallon containers of solids collected from the trenches at the Heat Exchanger Bundle Cleaning Pad. The hazardous waste label on the container (front right as shown in IMGP0617) was marked "Sludge and Debris".
IMGP0616	Close-up view of the hazardous waste label of the right rear container as shown in IMGP0617. The hazardous waste label read "sludge and debris" from ETP with an accumulation start date of 3/22/2017.
IMGP0617	View of the two containers of "Sludge and Debris" shown in IMGP0615 and IMGP0616. The two containers upside down on the left side of the pallet (front and rear) were empty.
IMGP0618	Tank T-303 at the Effluent Treatment Plant (ETP). T-303 is used to hold sludge from the Dissolved Air Floatation (DAF) unit.
IMGP0619	View of the port where vacuum trucks empty materials to feed into T-303.

IMGP0620	Tank T-203 for the 200 DAF train. Note the warping on the upper portion of the tank.
IMGP0621	Tank T-203. Note the warping on the upper portion of the tank.
IMGP0622	View of Clarifier 601.
IMGP0623	Overview of pipes and equipment positioned above the Wet Pit.
IMGP0624	View of the ETP surface impoundment, located north of Marine Drive and east of the Wet Pit.
IMGP0625	View of the ETP surface impoundment, located north of Marine Drive and east of the Wet Pit.
IMGP0626	View of Tank T-220 within the Unsegregated Wastewater Treatment System.
IMGP0627	Overview of the Unsegregated Wastewater Treatment System, facing northeast.
IMGP0628	Vacuum truck ramp at Tank T-189.
IMGP0629	Another view of the vacuum truck ramp and piping system, as shown in IMGP0628.
IMGP0630	View of the centrifuge (the horizontal blue and silver tanks positioned within the yellow scaffolding) at the Number 3 Separator area.
IMGP0631	Equipment and tanks located at the Number 3 Separator area. The blue tank on the left beneath the conveyor is a medium energy mixer.
IMGP0632	Overall view of the Number 3 Separator area.
IMGP0633	View of a condensation knock-out pot (black) located within the Number 3 Separator area.
IMGP0634	Roll-off bin in the Number 3 Separator area. The black hose hanging on the scaffolding is used to supply water if necessary to transfer material from the roll-off bins to the medium energy mixing tank. The red bin in this photo was marked Tank Cleaning Project 428.
IMGP0635	View of the MOSC tank, T-570.
IMGP0636	View of the MOSC tank, T-570.
IMGP0637	View of the coke conveyor. Chevron personnel explained that the liquid leaking from the conveyor was water, which is added to the coke to keep it in slurry form.
IMGP0638	View of the coke conveyor. Chevron personnel explained that the liquid leaking from the conveyor was water, which is added to the coke to keep it in slurry form.
IMGP0639	Accumulated coke (black material) within the unloading area near the coker.
IMGP0640	View of the mobile loader crane to move the coke product.
IMGP0641	Overview of pipes and equipment positioned above the Wet Pit and view of the ETP surface impoundment, located north of Marine Drive.
IMGP0642	View of the basin immediately east of the wet pit shown in IMGP0641.
IMGP0643	Overview of pipes and equipment positioned above the Wet Pit and view of the ETP surface impoundment, located north of Marine Drive.
IMGP0644	View of EPA and South Coast Air Quality Management District sampling an access hatch above Tank T-230 at the segregated wastewater treatment unit near Tank T-220 using a toxic vapor analyzer.
IMGP0645	View of EPA and South Coast Air Quality Management District sampling an access hatch above Tank T-230 at the segregated wastewater treatment unit near Tank T-220 using a toxic vapor analyzer.
IMGP0646	View of EPA and South Coast Air Quality Management District sampling an access hatch above Tank T-230 at the segregated wastewater treatment unit near Tank T-220 using a toxic vapor analyzer.
IMGP0647	View of EPA and South Coast Air Quality Management District sampling an access hatch above Tank T-230 at the segregated wastewater treatment unit near Tank T-220 using a toxic vapor analyzer.
IMGP0648	View of EPA and South Coast Air Quality Management District sampling an access hatch above

	Tank T-230 at the segregated wastewater treatment unit near Tank T-220 using a toxic vapor analyzer.
IMGP0649	View of the wastewater treatment unit from El Segundo Blvd.
IMGP0650	View of an unnamed surface impoundment located south of Tank T-484 and north of 8-Junction.
IMGP0651	View of an unnamed surface impoundment located south of Tank T-484 and north of 8-Junction. The two bodies of liquid are interconnected in the center, beneath the pipes in this photo.
IMGP0652	View of the eastern surface impoundment shown in IMGP0651.
IMGP0653	View of the unnamed surface impoundment shown in IMGP0651. This photo was taken facing east. Note the accumulated oil / petroleum waste accumulated along the bank of the surface impoundment.
IMGP0654	View of the eastern portion of the unnamed surface impoundment shown in IMGP0651. Note the oil / petroleum staining on the bank of the impoundment in the left portion of the photo.
IMGP0655	View of the western unnamed surface impoundment shown in IMGP0651.
IMGP0656	Overview photo of the two unnamed surface impoundments shown in IMGP0651. 8-Junction is shown in the center of the photograph. Another view of 8-Junction can be seen in IMGP0674.
IMGP0657	View of a stormwater outfall pipe positioned above surface impoundment shown in IMGP0651.
IMGP0658	View of a steam pipe draining into the unnamed surface impoundment shown in IMGP0651.
IMGP0659	View of a storm drain inlet pipe that is connected to the outfall shown in IMGP0657.
IMGP0660	View of another storm drain inlet pipe that discharges into the surface impoundment shown in IMGP0651.
IMGP0661	View of another storm drain inlet pipe that discharges into the surface impoundment shown in IMGP0651.
IMGP0662	Oil / petroleum staining beneath pipes located between the two unnamed surface impoundments shown in IMGP0651.
IMGP0663	View of the eastern surface impoundment shown in IMGP0651.
IMGP0664	View of a steam pipe draining into the unnamed surface impoundment shown in IMGP0651.
IMGP0665	View of the eastern portion of the unnamed surface impoundment shown in IMGP0651. Note the oil / petroleum staining on the bank of the impoundment in the left portion of the photo.
IMGP0666	View of a steam pipe draining into the unnamed surface impoundment shown in IMGP0651.
IMGP0667	View of the steam pipe draining shown in IMGP0666. Note the oil / petroleum staining on the bank of the surface impoundment in the left portion of this photo.
IMGP0668	Oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651.
IMGP0669	Oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651.
IMGP0670	Oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651.
IMGP0671	Close-up view of the oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651.
IMGP0672	Close-up view of the oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651.



IMGP0673	Close-up view of the oil / petroleum staining on the bank of the unnamed surface impoundment shown in IMGP0651. This photo was taken facing north.
IMGP0674	View of 8-Junction.
IMGP0675	View of a vacuum truck connection pipe which feeds into 8-Junction.
IMGP0676	View of the steam pipe draining shown in IMGP0666. Note the oil / petroleum staining on the bank of the surface impoundment in the left portion of this photo.



IMGP0599



IMGP0600



IMGP0601



IMGP0602



IMGP0603



IMGP0604



IMGP0605



IMGP0606



IMGP0607



IMGP0608



IMGP0609



IMGP0610



IMGP0611



IMGP0612



IMGP0613



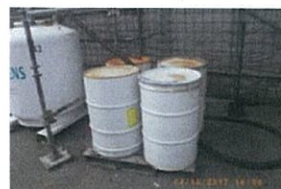
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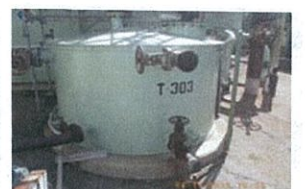
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